1 Architecting reconfigurable component-based operating systems

Juraj Polakovic, Jean-Bernard Stefani

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Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Citation Count: 0

Dynamic reconfiguration allows modifying a system during its execution, and can be used to apply patches and updates, to implement adaptive systems, dynamic instrumentation, or to support third-party modules. Dynamic reconfiguration is important in embedded ...

Keywords: Component-based operating systems, Dynamic reconfiguration, Embedded systems

2 Diffracting trees

Nir Shavit, Asaph Zemach

November 1996 **Transactions on Computer Systems (TOCS)** , Volume 14 Issue 4

Publisher: ACM

Full text available: Pdf (729.57 KB) Additional Information: full citation, abstract, references, cited by, index terms

Bibliometrics: Downloads (6 Weeks): 11, Downloads (12 Months): 46, Citation Count: 11

Shared counters are among the most basic coordination structures in multiprocessor conputation, with applications ranging from barrier synchronization to concurrent-data-structure design. This article introduces diffracting trees, novel data structures ...

Keywords: contention, counting networks, index distribution, lock free, wait free

3 Mutatis mutandis: safe and predictable dynamic software updating

Gareth Stoyle, Michael Hicks, Gavin Bierman, Peter Sewell, Iulian Neamtiu

January 2005 **POPL '05:** Proceedings of the 32nd ACM SIGPLAN-SIGACT symposium on Principles of programming languages

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Dynamic software updates can be used to fix bugs or add features to a running program without downtime. Essential for some applications and convenient for others, low-level dynamic updating has been used for many years. Perhaps surprisingly, there is ...

Keywords: capability, dynamic software updating, proteus, type inference, updateability analysis

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January 2005 **SIGPLAN Notices** Volume 40 Issue 1

4 *Mutatis Mutandis*: Safe and predictable dynamic software updating
Gareth Stoyle, Michael Hicks, Gavin Bierman, Peter Sewell, Iulian Neamtiu
August 2007 **Transactions on Programming Languages and Systems (TOPLAS)** , Volume 29 Issue 4
Publisher: ACM
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This article presents Proteus, a core calculus that models dynamic software updating, a service for fixing bugs and adding features to a running program. Proteus permits a program's type structure to change dynamically but guarantees the updated program ...

Keywords: Dynamic software updating, Proteus, capability, type inference, updateability analysis

5 Safe Class and Data Evolution in Large and Long-Lived Java[tm] Applications
Mikhail Dmitriev
August 2001 Safe Class and Data Evolution in Large and Long-Lived Java[tm] Applications
Publisher: Sun Microsystems, Inc.
Full text available: Pdf (876.82 KB) Additional Information: full citation, abstract, cited by

Bibliometrics: Downloads (6 Weeks): 6, Downloads (12 Months): 49, Citation Count: 1

There is a growing class of applications implemented in object-oriented languages that are large and complex, that exploit object persistence, and need to run uninterrupted for long periods of time. Development and maintenance of such applications can ...